**IAS – Assessment Task – Graduate Programmer**

On the following page you will find a brief for a Work Based activity.

The brief is based on the types of work tasks that are required at IAS.

During your scheduled interview appointment you are required to demonstrate your completed work to a panel of assessors. Subsequently, working with one existing member of the IAS team, you will also be required to verbally conduct a detailed code review.

You will be able to access the meeting room at the IAS offices and a computer 30 minutes prior to your invited interview time. This is to allow you to set up your demonstration. You will need to bring your work on a USB / CD or similar. You may also bring a laptop if you prefer. You will have access to an interactive whiteboard for your presentation. You will have access to the internet if you require this.

Following the work based activity there will be an interview. .

AIRCRAFT DATA MAINTENANCE

Data Description:

|  |  |  |  |
| --- | --- | --- | --- |
| **DATA ITEM NAME** | **DATA TYPE** | **DATA SIZE** | **NOTES** |
| Aircraft ID | integer |  | An internal ID, generated sequentially by the system, ie not entered/changed by the User. |
| Aircraft Rego | alpha-numeric | 7 | Value equates to the registration for this Aircraft, normally of form VH-123 but not to be enforced. |
| Aircraft Type | alpha-numeric | 15 | Values to be chosen from a preset list, eg Boeing 747, Harrier JumpJet, etc |
| Description | alpha-numeric | 128 |  |
| Odometer | decimal | 7,2 | Value equates to kilometres flown by this Aircraft |
| Flag | decimal | 7,2 | Value equates to the next servicing point for this Aircraft |

Functions:

**List Aircraft**

Provide window (form) displaying all data items for all Aircraft in grid-style layout. Provide buttons to access other functions. Where applicable, the function accessed is performed on the Aircraft selected in the list.

**Create New Aircraft**

Provide window (form) with blank entry and drop-down boxes for entry of all data items (except Aircraft ID) for a new Aircraft. Provide buttons to save (add Aircraft to list using next unused Aircraft ID value) or cancel (do not add Aircraft to list).

RULES: No duplicate Aircraft IDs allowed. No duplicate Aircraft Regos allowed. Flag value must be greater than Odometer value.

**Enter Odometer Reading**

Provide window (form) showing Aircraft ID, Aircraft Rego and Odometer of the Aircraft selected in the Aircraft list. Allow entry of a new Odometer value. Provide buttons to save (update Odometer value for selected Aircraft) or cancel (do not update).

RULES: Aircraft ID cannot be modified. Aircraft Rego cannot be modified. New Odometer value must be greater than old Odometer value. If new Odometer value is equal to or greater than Flag value, User is notified of that fact and asked to enter another Flag value – which must be greater than the new Odometer value.

**Change Aircraft Details**

Provide window (form) with entry and drop-down boxes showing all data items for the Aircraft selected in the Aircraft list. Allow update of all values (except Aircraft ID). Provide buttons to save (update changed values for selected Aircraft) or cancel (do not add Aircraft to list).

RULES: No duplicate Aircraft Regos allowed. Flag value must be greater than Odometer value.

**Delete Aircraft**

Provide window (form) asking for confirmation of the deletion of the Aircraft selected in the Aircraft list. Provide buttons to delete (selected Aircraft removed from list) or cancel (do not delete Aircraft from list).

RULES: If the Odometer value of the selected Aircraft is less than 500.00, reject delete request.